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ABSTRACT

World population growth and family planning progress in developing nations are discussed. The Draper Fund, established within the Population Crisis Committee (PCC) in 1975 to honor PCC's principal founder, encourages and funds activities which promise the greatest impact in slowing world population growth. There are 10 articles and an editorial. The first article discusses the agenda of the U.N. International Conference on Population held in Mexico City in August of 1984. Attitudes toward family planning and ways to take family planning to the people are the foci of the second and third articles. Contraceptive technology is discussed in the fourth article. Articles 5 through 10 assess family planning programs in Africa, the Middle East, Southwest Asia, East and Southeast Asia, China, and Latin America and the Caribbean. The report concludes that despite important changes in public attitudes and official policies, progress has not been rapid or widespread enough to reduce population pressures in the majority of developing countries. Future efforts must be intensified. (RM)

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DRAPER FUND REPORT

No. 13
JUNE
1984

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A Decade of Family Planning Progress.

William H. Draper, Jr.
1894-1974

The Draper Fund of the Population Crisis Committee

The Draper Fund was established within the Population Crisis committee in 1975 to honor PCC's principal founder, the late General William H. Draper, Jr. Contributions to the Fund are used by PCC to encourage and expand those critical activities which promise the greatest impact in slowing world population growth. The funds are directed to responsible organizations with overseas staff for key action projects which cannot be initiated without private sector support. Among such agencies is the International Planned Parenthood Federation, with member affiliates in 95 countries. In 1975 PCC established the Special Projects Fund to serve selected large donors who wish 100 percent of their contribution directed to specifically designated projects.

Although in the long run major new commitments from governments will be needed to solve national population problems, the role of the private sector remains indispensable. Non-governmental organizations, utilizing worldwide networks of volunteers, represent a vital and constructive force in influencing how soon and how soundly governments move. As General Draper often pointed out, contributions to such organizations can "do more good, dollar for dollar, than any similar amount employed in any other way."

Robert B. Wallace
Co-Chair

Robin Chandler Duke
Co-Chair

The Draper Fund Report

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The United Nations Conference on Population

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Population Activities

The U.N. International Conference on Population to be held in Mexico City in August, 1984, exactly ten years after the U.N. World Population Conference in Bucharest, will be a response to the unprecedented upsurge of interest in population over the last decade. It will offer developed and developing countries alike the opportunity to assess current and likely future population trends, to comment on programs and progress during the past decade, and to determine desirable future directions.

Rapid population growth is so much a feature of developing countries that it has become part of the definition of underdevelopment. There is now firm evidence of progress. An increasing number of countries are reporting declining fertility, and family size is diminishing in countries of widely varying ethnic, social and economic makeup. It is likely that the future will bring a steadily declining rate of world population growth, culminating in stability.

But present trends indicate that it will take more than a century for world population to stabilize and meanwhile, growth continues; the developing world's annual average birthrate from 1975 to 1980 was twice as high as the developed world's. Moreover, there are large areas—much of Latin America, for example, and most of Africa—where growth rates continue very high, and others, parts of Asia, for example, which do not follow the general declining trend despite, in some cases, a long history of population programs.

Effective programming in population is possible, as evidenced by the trends of the last decade. Interest in population programs and demand for resources to support them are growing as never before. But the population dimension is not always recognized in development planning. For example, among the vital determinants of population growth rates are the education and employment of women, the existence of effective maternal/child and primary health services, and an element of distributive social justice. Do development policies fully reflect this understanding?

National resources devoted to population activities have been increasing as a percentage of development budgets and now outstrip external assistance by a factor of two to one. But the experience of the last decade has illustrated that population assistance can make a uniquely valuable contribution to national development when it is given in accord with national policies, is appropriate to local conditions and needs, and is delivered where it can make the most impact. The continued and expanded assistance of the industrialized countries is still very much needed to ensure the success of population programs in developing countries.

Population policies encompass far more than the issue of growth alone. In Asia, for example, growth rates are generally declining and concern is mounting over rural-to-urban migration, employment, rural development, resources and the environment, and aging. In Latin America rapid growth is almost entirely in the cities and the emphasis is on employment and rural reconstruction. In Africa, infant mortality has been linked in most countries with high birthrates and consequent adverse effects on development.

All these policy issues affect different countries in different ways. For discussion at the International Conference on Population the issues will be grouped into four categories: fertility and the family; distribution and migration; population, resources and the environment; and health and mortality.

Fertility and the Family

Over the last two decades, the tendency toward lower birthrates and longer life expectancy has changed the age structure of many developing countries. The number and proportion of elderly in the population have increased and will continue to do so. The elderly still hold an honored position in traditional society, but the demands of modern development and the increasing numbers of the elderly make it imperative that their contributions, needs and desires be considered.

Patterns of family formation and dissolution have also changed, with consequences for social and economic policy. In the industrialized countries, smaller families and a high proportion of mothers working outside the home,

as well as one-parent families, create demands for care of children and the elderly. In most developing countries, however, the most important question is still family size and its effects on the health of mothers, children and society as a whole. The evidence is overwhelming that pregnancies too close together are harmful to both mothers and children, as are pregnancies at a very early or late age.

There is ample evidence that women in the developing world understand the risks of repeated pregnancy and would like to take steps to reduce them. Most know something about contraception, but it is widely used in only a handful of countries. It is evident that the providers of family planning services are not yet sufficiently responsive to women's own perceptions of their needs and that the social and economic conditions which make family planning a reasonable option do not yet exist.

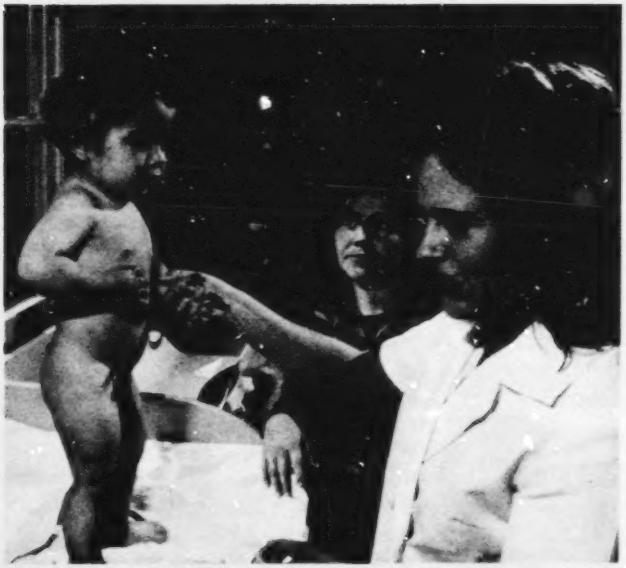
Distribution and migration: As a result of rapid population growth the scale of migration has increased in recent years—from countryside to town, from poorer countries to richer and from labor-abundant countries to labor-shortage countries. The United Nations estimates that cities and towns will contain nearly half the total world population by the year 2000. Many of the people most valuable to the rural areas (the young and educated) are moving to the city. When increased investment is not available to support these people in the urban sector, living conditions deteriorate.

Influxes of immigrants, short- and long-term, legal and illegal, create particular problems for both sending and receiving countries. It is important for sending countries to know what effects the absence of their nationals is having on the domestic economy. It is also essential that the receiving countries consider the protection of the human rights of international migrants, including settlers, workers, undocumented migrants and refugees.

Population, resources and the environment: It is a particular responsibility of industrialized nations to make careful use of limited resources and to ensure that their consumption contributes to the overall balance of the environment. Now that it is technically feasible to eliminate or at least limit environmental damage, the means to do so must be made economical and countries in the process of industrialization should be encouraged to take advantage of the technology in order to benefit their own and the global eco-system.

Health and mortality: As life expectancy increases, the proportion of deaths from infectious and parasitic disease decreases while the proportion attributable to degenerative and environmental causes increases. In developed countries the emphasis must be on prevention, particularly as medical treatment becomes more and more costly. Much progress has already been made, such as improving diet in the United States and thereby reducing cardiovascular morbidity and mortality.

In most developing countries infectious and parasitic disease is still the main cause of death, particularly among



Although in most of the developing world infectious and parasitic disease is still the main cause of death, particularly among the young, many diseases

the young. Much of this toll is preventable and for those countries with high mortality rates, particularly infant mortality, it becomes a major obstacle to development planning.

Future Directions for Population Policy

The International Conference on Population offers a unique opportunity to deepen and widen the international consensus reached ten years earlier, to review and revise the World Population Plan of Action and to establish in broad terms the conditions and direction of future cooperation. Conference delegates will first consider the recommendations of the Plan as a whole, relating the four sectoral areas to the general objectives of the Plan, which remain valid and will not be revised.

Second, the delegates will consider which areas covered by the Plan need additional emphasis. They will also discuss areas which are not fully covered by the Plan but which are of emerging importance to the world community. Specific recommendations will be needed concerning such issues as urbanization; international migration; and the balance between population, the use of resources and the protection of the environment.

Finally, the delegates will consider implications for the future—not the immediate future as much as the long timeframe in which population growth and movements evolve. Directions established by the Conference should remain valid for coming generations as well as our own. □

which have traditionally killed children are now preventable.

Attitudes Toward Family Planning

Halvor Gille
Project Director,
World Fertility Survey

Ten years ago the U.N. World Population Conference endorsed by consensus the bold principle that "all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so." It also recognized "the necessity of ensuring that all couples are able to achieve their desired number and spacing of children."

In practice, many of the 135 participating countries were far from accepting this basic human right. But considerable progress has been made, and the number of developing countries which provide direct government support for family planning has increased to over 60 percent. Many have liberalized laws and regulations which restricted access to modern methods of contraception, and a growing number provide family planning services within their health care programs. A few have even recognized the practice of family planning as a constitutional right—one, China, considers it a duty.

Still there is a long way to go. In late 1983 at the Second African Population Conference, recognition of family planning as a human right was strongly contested by several governments, particularly those of West Africa. Futhermore, some countries maintain legislation from their colonial past prohibiting publicity about contraceptives and restricting their sale.

Choice of family planning method is often very limited; half of developing world governments prohibit the use of certain methods, most frequently sterilization and induced abortion but sometimes also the pill and injectables. Many

countries withhold family planning services from certain groups such as young or unmarried people, and residence, income and other socio-economic conditions may seriously limit access.

In developed countries most of the women at risk of unwanted pregnancy are using contraceptives. Of the major developing regions the highest use level is in Latin America, where in most countries a third to a half of married women are users. Levels in Asian countries range from up to 10 percent in Afghanistan, Nepal and Pakistan to up to 40 percent in the Southeastern countries. China, a special case, probably now exceeds an overall use level of two-thirds of married women. Contraceptive use is lowest in Africa.

There is room for improvement even among many of the successful family planning programs, as access to contraceptives usually is not sufficient to overcome limiting factors. Merely distributing one or a few types of contraceptives in a poor traditional society may have some initial impact but be of little significance in the long run. Continuing education efforts are required to stimulate and maintain motivation for family planning.

Many African governments are interested in family planning as a means of spacing births and thus improving maternal and child health.

Promoting Contraceptive Use

Information and education programs to influence attitudes about childbearing and stimulate the use of contraceptives have been promoted in most countries, but with limited results unless local conditions, values and aspirations are taken into account. To ensure popular participation, the people for whom the program is designed should be involved in its planning and execution. This coordination may avoid the creation of false expectations, which can result in underutilization of services. For example, many programs emphasize family size limitation rather than birth spacing, although in many societies birth spacing is more readily acceptable and will, if successful, eventually lead to some reduction in family size. A number of governments, particularly in Africa, are interested in family planning mainly, or only, as a means of birth spacing and improvement of maternal and child health.

Education efforts are often directed primarily at couples who already have several children. It is equally if not more important to educate all individuals about family planning from the beginning of their reproductive lives, but the 1974 World Population Conference failed to mention sex education. Sex education, a part of family life education, should be introduced as early as possible in schools and through other formal as well as informal channels.

Many women, particularly in rural areas, are aware of contraceptive methods but fail to use them because family planning advice, services and supplies are inaccessible, perhaps because of long distances. Family planning programs must find ways to bring their services to the doorsteps of potential users.

As family planning services expand, the maintenance of an adequate supply of contraceptives is an increasingly serious problem, and most programs rely heavily on subsidies from governments or international agencies for their supplies. Self-reliance should be promoted and local manufacturing and packing be explored and encouraged. Regional or sub-regional co-operation and other joint efforts may prove beneficial.

Another problem facing family planning programs is the need for follow-up service and advice, as side effects of some contraceptive methods may cause high discontinuation rates. The availability of advice or other methods could reduce discontinuation rates substantially.

To ensure the individual's free choice and strengthen the acceptability and practice of family planning, all available methods should not only be provided in service programs but also be included in information and education activities. In this connection it should be recognized that induced abortion is a method of widespread use, although it is often controversial and carried out under very unsafe conditions. Well over two-thirds of the world's people live in societies where abortion is legal and available to all or permitted for socio-economic and health reasons.

Although women in developing countries are generally not breastfeeding deliberately to space pregnancies, the birth interval is lengthened by one-third to two-thirds of a month for every month of breastfeeding on fertility rates. In Africa and Asia most women breastfeed for one to two years, but in Latin America the average length is less than one year.

The majority of women breastfeed, but the practice is declining as a result of urbanization, education and employment of women outside the home—in other words, as women participate in development. At the same time, these social changes tend to increase contraceptive use. As breastfeeding provides a degree of protection against the risk of pregnancy, the crucial question is whether increased contraceptive use will at least neutralize the impact of decreased breastfeeding on fertility rates. Much more can be done to educate mothers about the nutritional value of nursing and to facilitate breastfeeding wherever possible. In many countries maternity leave and benefits could be improved and legislation be more effectively enforced to maintain prevailing breastfeeding patterns.

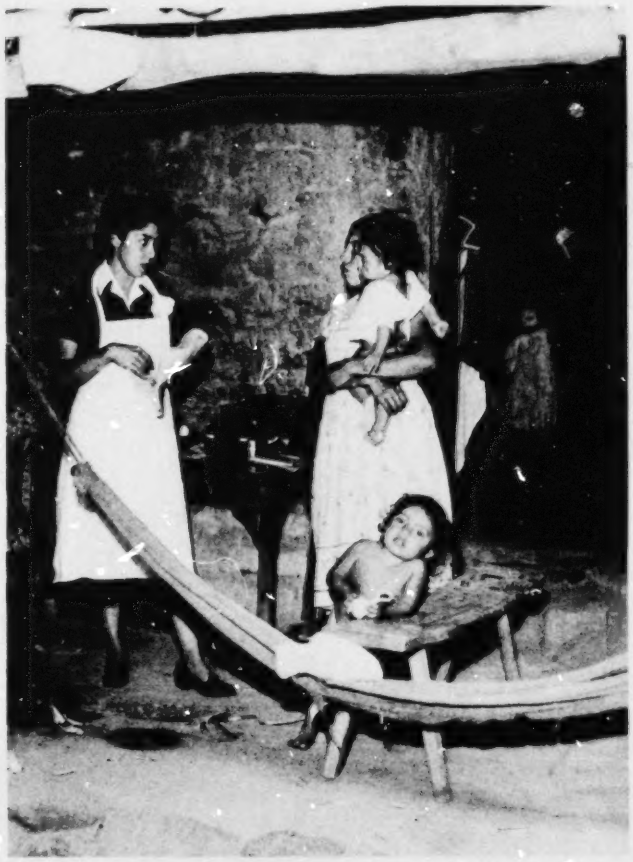
Commitment to Family Planning Goals

Family planning programs should engage local community groups, including voluntary organizations, in all aspects of planning, management and allocation of resources. Population and family planning education should be promoted by utilizing the organization, outlets and workers of other social programs such as agricultural extension, trade unions, co-operatives, women's organizations and community development projects.

Prevailing social, cultural and economic restrictions in many societies undermine the status of women and prevent them from participating in family planning and other development programs. Greater involvement of women, not only in provision of services but also in management, policy-making and program design, will strengthen the acceptance and practice of family planning.

In most countries fully committed to family planning, a shortage of financial resources seems not to be the most serious constraint. Allocations at the national level have been growing steadily in these countries, but to implement programs effectively considerably more resources are required.

At the government level a clear political commitment to family planning and population policies is essential, as is administrative support. All government agencies concerned with socio-economic benefit to the family and the community should be involved in the coordinated planning and implementation of family planning activities. Nongovernmental organizations can play an important role by sustaining government efforts, taking new initiatives and demonstrating the application of new approaches. National and international efforts should be directed toward making safe and effective family planning easily available to all by the end of the century. □



Programs that bring health education and services, including family planning, directly into the home are likely to be widely accepted.

Taking Family Planning to the People

Nuray Fincancioglu
Head of Policy Analysis,
International Planned Parenthood Federation

Profound changes have taken place in family planning during the past decade. Conceptually, it is now widely recognized that family planning is part of development; that its contribution to improving the health of women and children, reducing infant and early childhood mortality, and enhancing the status of women is essential to individual and community development. This clearer understanding has been a significant factor in the spread of government support for family planning, particularly in Africa and West Asia.

At the same time the focus of development efforts has shifted from economic to social development, making the quality of life a primary concern. Strategies now place people at the heart of the development process, and the concept of people's participation in the planning and implementation of programs that are meant to serve their needs is now widely accepted as a guiding principle.

These conceptual changes, together with the lessons learned during the first decade of nationwide family planning programs, have significantly influenced the design and delivery of services. Many early programs were characterized by strong central administration and a clinic-based network, but this pattern had disadvantages. Weak health infrastructures, to which contraceptive services were attached, did not reach large sectors of the population, particularly in rural areas; and it was difficult for already over-burdened health personnel to undertake yet another task which was perceived as an addition to health services rather than part of them.

Today we see a much more diversified pattern of service delivery, considerably extended through the development of a wide range of supply and distribution channels. In most areas, nongovernmental organizations have played a crucial role in the development of innovative approaches to making contraceptives widely available—a role acknowledged and supported by governments.

The Question of Integration

In many countries provision of contraceptives through the national health system continues to be the backbone of the family planning program. Changes in the approach to health care itself have helped increase both the accessibility and the acceptability of family planning services.

Two factors necessitate a close link between contraceptive and health services: the need for medical skills and facilities in the provision of surgical methods of contraception, and the importance of medical supervision in the continuing use of other methods. This link is most effective when the health system is used in conjunction with non-medical channels of contraceptive delivery. One of the most widely used approaches integrates contraceptive delivery with other development programs, community-based distribution of contraceptives, and commercial retail sales.

The question of integrated vs. "vertical" family planning services has been widely debated in recent years. When people have other urgent needs such as food and shelter, family planning services may have little appeal; but linked with other development activities, such as nutrition, health care and programs to improve women's status, they help people meet their immediate needs and in turn become more acceptable. Integrated approaches may appear costly if their return is measured only by the increase in contraceptive practice, but the higher continuation rates they ensure make them cost-effective in the long run.

A practical consideration in integrated programs has been the need to make the maximum possible use of already available resources and existing community networks. A growing number of personnel working in rural development programs such as agricultural extension, nutrition, home economics and parasite control are being trained to teach family planning and distribute various contraceptives. In some countries, such as Indonesia, the reverse has been true: health and nutrition services have been added to the well-established network of the family planning programs.

Community and Commercial Distribution

The cornerstone of community-based distribution (CBD) is extensive use of community networks and of trained

community residents, such as teachers, shop-owners and dressmakers. An effective project requires efficient resupply and distribution mechanisms, carefully designed supervision systems, and medical back-up facilities. Distributors must be trained to detect both contraindications to specific contraceptives, especially oral contraceptives, and symptoms of side effects which might require medical attention.

The use of CBD has rapidly spread to more than 40 countries, most of them in Asia and Latin America. Dramatic increases in contraceptive use have been experienced in almost all of these countries. A CBD project in Bangladesh, for instance, has raised the local contraceptive prevalence rate to nearly 50 percent.

Wider use of existing commercial retail outlets, another promising avenue, is being followed in more than 30 countries. Pharmacies and shops, especially in villages and small towns, extend the availability of contraceptives and make their purchase part of daily life. With some basic training, pharmacists and shop-owners can provide advice on the use of contraceptives and refer people to facilities where other fertility regulation services can be obtained.

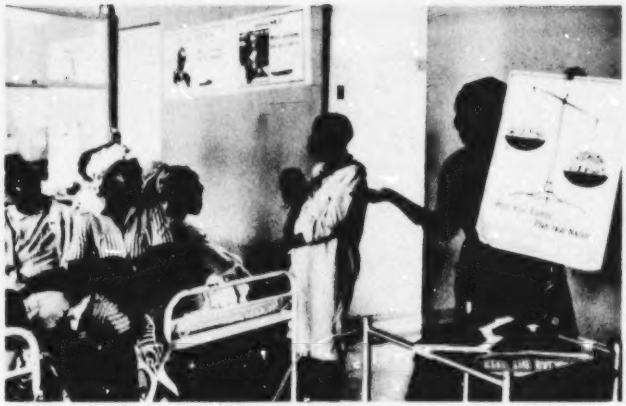
In many countries this approach has been considerably extended and large-scale projects, subsidized and operated by the government, have been established. Experiments in countries such as India, Sri Lanka and Jamaica have resulted in dramatic increases in the sale of condoms and oral contraceptives. The Indian government recently decided to establish a private non-profit Contraceptive Marketing Organization to procure and distribute contraceptives.

But the expectation that these projects would quickly become self-sufficient has not been realized; a considerable subsidy is still required to maintain their efficiency. Nevertheless, as effective channels for increased contraceptive use, they constitute sound financial investments.

Ever-Increasing Options

Efforts to increase the availability of contraceptives have been facilitated by the widening range of service providers. Nurses, midwives, traditional birth attendants and ordinary members of the community are now being trained to perform many family planning tasks in clinical and non-clinical settings. Prescribing oral contraceptives and inserting IUDs are among the responsibilities of nurses and midwives in several countries.

Many of these advances have been possible with the liberalization of laws and regulations governing the distribution, provision and use of fertility regulation methods, including voluntary sterilization and abortion. Legal change does not always precede diversification of service delivery



African development programs increasingly stress population planning.

Community education is important to family planning acceptance.

Pharmacies and shops greatly extend contraceptive availability.

channels, however. In Lebanon, for instance, the law forbidding the advertising and distribution of contraceptives was only recently repealed, although the voluntary family planning association has been operating a large-scale CBD program for many years with the full knowledge of the government. Similarly, in many African countries, governments and voluntary organizations are actively providing family planning services despite a 1920 French anti-contraception law still in effect.

The two-child norm is now widespread in many Asian countries.

Anniversaries give rise to mixed feelings of hope and disillusionment. There is every justification to feel gratified at the progress made in family planning, but the task of providing all couples and individuals with the knowledge and means necessary to plan their families, as envisaged ten years ago, is far from accomplished. The unmet need for contraceptive advice, services and supplies is still enormous, especially among those who need them most. The greatest challenge to governments and nongovernmental organizations is to find more effective ways of taking family planning to these people while at the same time recognizing that the key to success will lie in sensitivity to their needs, perceptions and priorities. □

Contraceptive Technology

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The 1970s transmitted a message of hope about family planning. During the decade millions of couples made it clear that they wanted to control the size and spacing of their families. However, the goal of a simple, safe, effective and widely acceptable contraceptive was still a long way off. The challenge of the 1980s is to improve family planning services to meet the need so widely stated but left unmet in the seventies. How will contraceptive technology contribute to this end?

The 1970s brought several incremental improvements in contraception. This trend is likely to both continue and accelerate in this decade, although there may not be any of the "breakthroughs" so beloved by the media. Because the easy opportunities in fertility control have already been exploited, the development of new contraceptives has become a slower and more expensive process. The focus must therefore continue to be on finding new ways to distribute the old methods, such as social marketing and the use of medical auxiliaries.

While it is easy to make pregnancy unlikely, it is difficult to prevent conception altogether. Contraceptives are not switches that turn fertility on and off. Most modern contraceptive methods are not reliable enough to control fertility completely over the reproductive lifetime. A small, modern family is achieved more often than not by the combination of contraception, induced abortion and voluntary sterilization.

A prevailing belief of the 1970s was that the greater the number of contraceptive alternatives available to a community, the higher the overall acceptance would be. Much

was said about offering a "cafeteria" of methods, but in fact most national family planning programs remained limited to one or two official methods with a few others sometimes available in the private market. A true choice of methods to fit the varied cultural, health, and birth planning needs of couples has yet to be realized.

Improvements in Existing Methods

While no "magic potion" appeared in the seventies (nor will there be one in the foreseeable future), significant changes in existing technology resulted in safer and more effective contraceptive methods. Voluntary sterilization emerged as the primary method in both developed and traditional societies, as important modifications simplified the procedure for women. The tolerance and effectiveness of the IUD were improved by reducing its size, adding copper to its surface or encapsulating progesterone within it. The steroid content of the birth control pill was reduced tenfold, leading to fewer side effects, and the pill was found to be an be effective postcoital contraceptive when taken at specific intervals. Vacuum aspiration, developed in China for the termination of first-trimester pregnancy, proved to be one of the safest surgical techniques practiced.

Belated attention is now being focused on adapting existing contraceptive methods for use during the postpartum period and breastfeeding. The insertion of an IUD immediately after childbirth is a particularly useful option in the developing world as an increasing number of women have their babies in urban hospitals. The last few years have demonstrated that there is no added risk of injury or infecton if the IUD is inserted within a few minutes after delivery of the placenta. Careful selection of the IUD type and design sufficiently reduces the risk of expulsion.

The effectiveness of breastfeeding in preventing pregnancy varies considerably among women. A method of enhancing the contraceptive effect of breastfeeding should neither change milk production nor transfer the drug to the nursing infant. Fortunately, progestin-only pills have been found to have no effect on breast milk and an attempt is being made to expand the use of this approved method.

While male sterlization can be readily performed by nonspecialists and medical auxiliaries, still more simplification of female sterilization is needed. Current techniques require back-up facilities in case of complications and are unlikely to meet the developing world's enormous demand. This realization has turned attention to the use of agents that block the fallopian tubes and can be applied through the uterine cervix, providing a very low failure rate.

Two methods not widely used, spermicide and periodic abstinence, are coming under new scrutiny. An additional

Improvements in sterilization technology have helped make voluntary sterilization the most popular method of birth control worldwide.

A wide array of contraceptive choices results in higher levels of use, but most government programs still offer only one or two methods.

The absence of additional effective contraceptive methods for males leaves women with the burden of family planning.

advantage of spermicides is their ability to kill many of the organisms responsible for sexually transmitted diseases. And improved instruction has stimulated a resurgence of periodic abstinence (also known as rhythm) as a family planning method.

In mid-1983 the U.S. Food and Drug Administration (FDA) approved a spermicide-impregnanted disposable sponge for over-the-counter sale in that country, and other disposable vaginal barriers might also be developed. Although most are likely to have relatively high failure rates, a nonprescription method of contraception that can be purchased cheaply and without embarrassment is likely to appeal to many women, perhaps especially the very young women who currently contribute so much to the burden of unintended pregnancy in western countries.

The 1980s are likely to see some significant new ways of delivering well-known steroids for female contraception. For example, the Population Council has developed a device which, implanted under the skin of the arm, releases a steroid continuously in very low quantities, giving reliable protection against pregnancy for up to five years. When the woman desires, or when the steroid is used up, the device is surgically removed. Other biodegradable devices are being developed by the U.S. National Institutes of Health. The U.S. Agency for International Development is supporting the clinical development of a sustained-release injectable which will combine the convenience of an injectable with the more satisfactory slow-release properties of an implant.

Because the vagina will absorb drugs, another way of delivering steroid hormones is to put them in a silastic ring which the woman can insert herself. There are two types of rings: one that is left in place continuously (except for cleaning), and one that is worn three weeks out of four. All long-acting methods—implants, vaginal rings, sustained-released injectables—give rise to menstrual irregularities but relatively few other side effects.

United States government policy forbids the support of research on abortion technology, and private pharmaceutical firms have been criticized for working in this field. In other parts of the world, however, research continues into the action of hormone-like substances called prostaglandins. They have been shown to be effective in a small number of cases by women who used vaginal suppositories of the drug at home to induce a late menstrual period. Major efforts in this direction will depend on a fuller consensus on the ethics of terminating very early pregnancy.

Several developments are not likely to occur in the 1980s. It is not likely that a contraceptive pill for males will be produced, simply because the medical community's fundamental understanding of male reproduction is not sufficiently advanced. Attempts over the past dozen years to develop a steroid injectable for men have failed, although gossypol, the cottonseed derivative used by the Chinese, is under careful study and shows some promise. It is also possible that analogs of the brain hormone LHRH (luteinizing hormone releasing hormone) will become a reliable inhibitor of sperm production.

Analogs of LHRH also hold promise for new methods of fertility control for women, perhaps in the 1990s. Nasal administration of these compounds, which is effective in suppressing ovulation, causes menstrual irregularities. Improved delivery systems such as microencapsulation may speed development.

The current explosion in the understanding and manipulation of the body's immune system and the rapid development of monoclonal antibodies for medical use set the stage for the one breakthrough that might occur in contraceptive technology—a vaccine against some unique protein of pregnancy. But here again, even when a promising technique is developed, several years are likely to be necessary for clinical testing before widespread use is possible.

The hard work of developing new methods of contraception and following up on the safety of those already in use must remain a priority in this decade and the next. Western nations are currently investing pitifully few resources in this area. The United States, for example, spends only the equivalent of the cost of one hamburger per citizen per year on all aspects of reproductive and contraceptive research and less than the price of a lollipop once a year on actual contraceptive development. Western women and men should demand better than this in their own interest—not to mention in the interest of the overwhelming needs and demands of the families of the developing world. □

Africa Assessment

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Some of the highest birthrates in the world today are found in Africa. In fact, high fertility rates—crude birthrates of over 45 per 1,000 population—are the general rule in all African countries except a few such as Egypt, Gabon, Reunion, South Africa and Tunisia. The very highest birthrate estimated for any country in the world is that of Kenya, whose population is increasing at an estimated 4.1 percent a year. As a whole, Africa's population of 513 million is growing at an annual rate of about 3.0 percent. In contrast, the developed world has a crude birthrate of 15 per 1,000 population and is growing at an annual rate of 0.6 percent.

As is true elsewhere in the developing world, Africa's population problem is compounded by attitudes and traditions that favor large families. Children provide status, and male children are eagerly desired to carry on the ancestral line because, despite women's dominance in agriculture, traditional education has inculcated male supremacy in African society. Traditional African attitudes equate having many children with male pride, social status and security. In most cases, bearing children is the best, and often the only, way for a woman to achieve some status in her community. Extended family systems reinforce these attitudes and bring direct pressure on women to "prove their worth" by producing many offspring. The total fertility rate is over six children per woman and it is not unusual for couples to hope for eight or even more children.

While education and modernization have begun to change these attitudes for a few people, particularly in urban settings, the desire for large families is extremely deep-rooted and remains widespread among African society. Nor has declining infant mortality made much of an impact on fertility, although it must be noted that death rates are still so high that losing a baby is not unusual for many families. Fertility trends for the continent have been an exception to the prevailing global pattern of declining birthrates. Crude birthrates have hardly changed at all in the past thirty years—dropping only from 48 to 46 births per 1,000 population. Moreover, the momentum of rapid

Some of the highest birthrates in the world are found in Africa, where many women depend on prolific childbearing for status and security.

Many developing countries—in Africa and elsewhere—which were self-sufficient in food a decade ago must now rely heavily on food imports to feed their expanding populations.

There is now some hope that Africa will start to pull itself out of the population dilemma that has proven so harmful to its development efforts by prompting or exacerbating many national problems.

population growth is likely to continue as those under the age of 15, now almost half of Africa's people, grow into adults and begin to have their own children.

Despite the traditional influences on childbearing, powerful forces for change have been at work during the past ten years, and there is some hope that Africa will start to pull itself out of the population dilemma that has proven so harmful to its development efforts. More and more governments are becoming acutely aware that many national problems are either prompted or exacerbated by a rapidly growing population. Some countries that once provided their own food now must import it. Overgrazing and population pressures in rural areas have reduced the amount of arable land available per family. Cities are growing at such a rapid rate that many will triple in size by the end of the century. Already African leaders have witnessed the spread of slums and unemployment rates of 10 to 25 percent in their cities.

Some governments have been aware of their serious population problems for quite some time. For example, family planning policy has been operative in the Kenyan Ministry of Health since 1969; family planning services were taken over by the Botswana government in 1973; and it is now 15 years since Tanzania incorporated contraceptive services into its health system. Lately, some governments have strongly reaffirmed their interest in tackling the population problem. Kenya, for example, recently instituted a National Council for Population and Development.

The interaction between population and development is now well understood. Policy planners in Africa no longer take for granted the notion that development will help check population growth. Consequently, many African governments have embarked upon programs to ensure that more and better-trained health personnel are bringing family planning information and services to rural areas, where pro-natalist traditions are especially pervasive.

A Model for Success

One model for this approach is found in Kenya, where family planning services are now to be offered within the concept of "district focus." National family planning activities will be planned and implemented at the district level throughout the country, offering a better opportunity for community understanding. Rural health centers, which are the major health service delivery points in Kenya, will become key delivery points for family planning services. Services will also continue to be provided at clinics run by the National Family Planning Association.

A successful pilot project is found at Ageng'a in the Busia district of Kenya, where the community-level family planning and primary health care program emphasizes inte-

grated family services, shorter distances to service delivery points, and health and family planning education aimed at the father as well as mother. The Ageng'a Project covers an area of 260 square kilometers and a population of 50,000. The key element of this project is the use of community-based health workers with limited but adequate training in family planning technology and primary health care to provide front-line services and refer patients to rural health facilities and hospitals.

In addition to being trained in primary health care and family planning, these community health workers are exposed to basic agricultural skills, craftswork of all types, bee-keeping, livestock development, fishing, food preservation and meal preparation, as well as simple marketing of family produce and family budgeting. In this way they can offer useful help to their clients and discuss socio-economic or cultural problems that might interfere with the acceptance of family planning advice.

Three years ago family planning services reached only 30 percent of the people of Ageng'a. With the training of 161 local community health workers, family planning coverage now extends to an estimated 90 percent. This amounts to a three-fold increase in only three years, and about a doubling in clinic attendance. The Ageng'a approach seems to promise useful results for future programming, particularly in the countryside. It is inexpensive to operate since, by utilizing mainly human resources, it is labor intensive, an aspect that greatly appeals to local communities with high unemployment rates. The "district focus" concept encourages use of the dispensary as the basic unit to handle family planning services and the marketing of contraceptive devices by both the private and public sectors so that the people in need can have better access to both services and supplies.

But, as in other African countries, Kenya's National Family Planning Program requires more strengthening if it is to curb the ever-threatening population growth rate. In a number of countries, community health workers and other paramedical and auxiliary medical staff are not allowed to distribute contraceptives. It is hoped that the Ageng'a Project community health workers, who have now completed their training in community-based distribution, will demonstrate the supportive role which paramedical and auxiliary staff can have in facilitating the spread of services to a greater number of families.

The Ageng'a Project should prove to be a useful and progressive example of client-oriented services, not only for Kenya but for other African countries. With this type of integrated and culture-sensitive approach, African countries will gain a significant advantage in their quest to lower birthrates. □

Middle East Assessment

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The Arabs speak the same language, they share with pride a common culture and they are predominantly Moslems. The Arab world consists of 21 countries and the people of Palestine. They extend from the Arab Gulf in Asia to the Atlantic coast in Africa, covering an area half as large as the United States. Their total number in 1983 was 180 million, 3.7 percent of the world's population.

Despite considerable wealth—many Arab countries have large reservoirs of oil and great mineral resources—the Arab world suffers a number of population problems. They differ from one country to another but share certain features: a high rate of population growth; a young population; large family size; high maternal, perinatal and infant mortality; moderate life expectancy; uneven distribution of population; and uneven distribution of wealth.

The growth rate of the Arab world, 3.3 percent a year, is one of the world's highest, higher even than that of the developing regions as a whole, which is 2.1 percent. A rate of increase of 3.3 percent means that the 180 million Arabs will double in number in only 21 years.

The total fertility rate is as high as seven or more children per woman in Algeria, Libya, Bahrain, Jordan, Oman, Saudi Arabia and Syria, while the lowest, four children per woman, is found in Lebanon. This high fertility is a function of many factors such as the universality of marriage and the early age at marriage, especially for women; the cultural correlation between femininity and fertility; and the fact that children are traditionally a source of prestige to rich families and of income to poor families.

One very important factor in overpopulation of the region

is lowered crude death rate. Although it is still high in countries such as Somalia and North Yemen, at 21 deaths annually per 1,000 population, in much of the Arab world it is now at about the global average of 11. The crude birthrate, meanwhile, remains as high as 46 to 48 births annually per 1,000 population in countries such as Iraq, Syria, Lybia and Jordan, compared to a global average of 29. With the improvement of medical services it is expected that the situation in the overpopulated countries will become worse.

Another feature of many Arab countries is young population. Because of improved health services in the field of obstetrics and perinatal medicine, newborns have an ever-better chance of survival. This, combined with a high fertility

Almost half the population of Arab countries is less than 15 years old.

rate, has resulted in a very young population—almost one-half below the age of 15 in Jordan, Syria, Algeria and Libya. Such a population composition means a high dependency rate for both society and family, and is a major obstacle to economic development.

With just under 13 inhabitants per square kilometer, the Arab world as a whole should have no population density problem. However, because of climatic factors, political situations, and availability of resources and job opportunities in certain areas, there is serious maldistribution of the people. A clear example is Egypt where 99 percent of the population occupy only 4 percent of the land, mainly in the narrow valley and the Nile Delta. Big cities attract people, and the population density of a city as large as Cairo can reach dangerous levels. Greater Cairo includes districts with more than 130,000 inhabitants per square kilometer.

Some Arab countries are underpopulated, however, when viewed in light of their extensive resources and vast area. Underpopulation is a major problem for Saudi Arabia, Libya, Kuwait and other Gulf states, where laborers are in short supply. The situation is made more difficult by the underutilization of women in the labor force.

Population Policy in Arab Countries

All governments of the Arab world are aware of the population issue, and there has been increasing interest in policies designed to bring about a lower rate of natural increase and an older population age structure. It is generally believed that overpopulation is a major obstacle to economic development. Population activities in the Arab countries can be divided into three categories.

National policy to reduce population growth: This group includes Egypt, Tunisia and Morocco, which suffer severe problems of high density, young age structure, and lack of balance between the population and the economy. In these countries an active national family planning program operates alongside many active nongovernmental family planning associations. Reduction of the growth rate is considered urgent and emigration is encouraged.

Egypt's population, which quadrupled between 1900 and 1980, has now passed 46 million and will double in 25 years if the rate of natural increase continues at 2.8 percent a year. The total fertility rate is about five children per woman, varying from four in the major cities to seven in rural upper Egypt.

Family planning services are provided by a combination of public and private agencies supervised by the Ministries of Health and Social Affairs. Contraceptives are readily available through commercial outlets, and village-level social and economic activities are promoted in conjunction with family planning services.

There is a marked change in the policy and attitude of Egypt's political leadership since President Mubarak came to power. Stating that "We cannot ignore the fact that the rate of population increase will hinder our efforts for improving the quality of life for every Egyptian," in 1982 he requested the preparation of a National Conference on Population to take place this year and agreed to chair the National Council on Population. President Mubarak's commitment and continuous attention to population, which he has described as "the problem of problems," will help Egypt reach its demographic and economic goals.

Tunisia's population of 6.8 million is increasing at a rate

of 2.5 percent per year which, although high, is one of the lowest growth rates in the Arab world. But in order to reach its demographic and economic goals, Tunisia must continue its family planning efforts and lower its fertility rate of almost six children per woman.

This country, which has created a milieu of relative freedom for women, is the only one to offer voluntary sterilization and first-trimester abortion on request. Between 1974 and 1982 there was an extensive information and education program, and 70,000 women obtained sterilizations. A vasectomy program launched in the mid-seventies was abandoned, however, because of negative public opinion, demonstrating the need for a careful and slow educational process for the male population. The Tunisian Association for Voluntary Sterilization, established in 1981, has undertaken this task.

There is no doubt that the leadership of President Habib Bourguiba, who in 1973 asserted that there is no religious prohibition of family planning, played a major role in the success of family planning in Tunisia.

Morocco includes family planning in its health and welfare services and there is an active voluntary family planning association. But the country's annual growth rate of 3.1 percent means that its population of 23 million will double in 22 years.

Non-governmental efforts to reduce population growth: Countries in this group, which include Algeria, Bahrain, Iraq, Jordan, Lebanon, Sudan, Syria and Democratic Yemen, have major population problems and generally support reduced growth rates, but as yet they have no national family planning programs. In this group the highest rate of population increase is in Syria, 3.8 percent a year; the highest total fertility rate is in Bahrain with almost eight children per woman.

In Algeria, socio-economic development is perceived as the main solution to the problems related to overpopulation. The maternal and child health programs include the family planning services in collaboration with the International Planned Parenthood Federation.

Sudan has an active family planning association and the government is increasing its attention to family planning services. The country's crude birth and death rates are both high, and an expected decrease of the death rate will worsen the problem of overpopulation.

Although Lebanon has no national family planning program, there is an active family planning association and contraceptive services are easily available.

Countries with pronatalist policies: In this group, which includes Saudi Arabia, Kuwait, Qatar, Libya and Oman, the problem is underpopulation, and the policy is pronatalist. Methods of contraception are available, however, in the private sector. The outstanding feature of these oil-rich countries is their high per-capita gross national product. A 1981 estimate showed Qatar's, at U.S. $27,790, to be the highest in the world.

Saudi Arabia occupies approximately four fifths of the Arab Peninsula, but only about 1 percent of this area is cultivable. Its annual growth rate is 3.1 percent, which means its population of 10.4 million will double in 22 years. The average number of children per woman is just over seven.

The Saudi Arabian government does not have a comprehensive population policy, as it believes that the country's size and resources make its present level of fertility acceptable. Furthermore, attempts to reduce fertility are usually met with resistance from traditional quarters.

The average family size in many Arab countries is over seven children.

Generally speaking, all the governments of the Arab world have become aware of population issues and of the population pressures within their own borders. There is increasing interest in policies and programs that promise to bring about a decline in fertility sufficiently rapid to overtake the decline in mortality, with a goal of lowering the rate of natural increase and thus creating an older population age structure. Although some population problems, such as a very youthful age structure, are general to the Arab countries, each government faces a unique combination of problems and advantages. Each must continue to develop family planning policies and programs appropriate for its own people. □

Southwest Asia Assessment

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Southwest Asia supports one third of the world's population and includes India, the world's second most populous country (after China). Hundreds of millions of people in the region have been born into an unending struggle to wrest a decent life from an increasingly impoverished environment. But no other region is as acutely aware of the consequences of rapid and excessive population growth; nor has any other region consciously devoted so much of its resources to stemming this tide.

India, with a population of 684 million, formulated a policy of population limitation in the 1950s—the first country in the world to do so. The Indian government enthusiastically accepted the challenge of the 1974 World Population Plan of Action (WPPA). Family planning efforts, particularly sterilization, were intensified during Emergency Rule (1975-77), but the target-oriented program sometimes degenerated into compulsion. This inevitably unpopular campaign contributed to the electoral rout of the ruling government, and the succeeding government distanced itself from family planning. The immediate ballooning of population figures, however, soon generated public demand for renewed commitment to voluntary programs. The 1980 government boldly rededicated itself to voluntary family planning and rebuilt the broad coalition of an excellent infrastructure of government institutions, voluntary organizations and international agencies. As Prime Minister Gandhi declares, India "cannot afford the risk of increasing numbers ... cannot afford to wait for social and economic change. Human will must intervene and change the circumstances." There has been no stronger commitment than India's to the WPPA.

Bangladesh, with a population of 89 million, has never swerved in its dedication to a population limitation policy despite checkered political developments. Government support for family planning clinics commenced in the 1960s, when this country was still part of Pakistan, but it was the trauma of the 1971 liberation struggle that triggered the massive provision of family planning services. The First Five Year Plan (1973-78) explicitly declared that "no civilized measure would be too drastic to keep the population of Bangladesh on the smaller side of 150 million." The family planning program is an integral part of the national health service and relies heavily on trained volunteers and traditional midwives to backstop medical professionals. A strong institutional structure has been established, right down to the grassroots level, under the supervision of the National Population Council. Innovative approaches to family planning service delivery have been initiated by an admirable array of institutions. In recognition of its efforts, Bangladesh is probably the major recipient of foreign assistance for family planning activities.

Although **Pakistan**'s society is strongly traditional and conservative elements are dominant in its rural areas, this country of 87 million has long been dedicated to reducing the growth rate of its population. Its Population Welfare Plan provides substantial funds and an administrative structure to make maternal/child health care and family planning services available in rural areas. Another welfare program encourages smaller families through projects to enhance the status of women by improving literacy, establishing rural industries and advocating late marriage. In Pakistan an informed leadership is guiding a conservative population toward accepting family limitation. Phrasing his message in traditional idiom, President Zia asserts that "God is the provider, but it is our duty as rational beings to consider the adverse effect on our food resources in the year 2000 when our population will have doubled itself."

Nepal was slow to recognize the population crisis that was causing its mountainsides to be ravaged. It was only the Fifth Development Plan (1975-80), formulated after the WPPA, that established institutions and targets for population and family planning activities. Burdened with an impoverished population and an inhospitable terrain, Nepal has had to struggle with a poor administrative infrastructure, grossly insufficient medical services and an inadequate data base for policy formulation. Family planning services are now a component of the overall health program, which has two significant features: the number of projects focused on improving the economic and societal role of women and the use of traditional medical practitioners to deliver family planning services. These traditional

practitioners serve over three quarters of Nepal's population—a population of 15 million which has only one qualified Western-trained doctor for every 32,000 persons. A massive infusion of international assistance constitutes a vital element of Nepal's ambitious population program.

Afghanistan's 13 million population is a unique blend of nomadic, pastoral and agricultural people bound by tribal loyalties; the government hopes to mold them into a socialist society. Women and children in the rugged mountain valleys suffer from malnutrition, poor access to health services, and continuing armed conflict. The family planning services of the pioneer Afghan Family Guidance Association (established in 1968) have been incorporated into the national maternal/child health program. Conscious of the depressed status of women in a "feudalistic" society where they marry young, bear too many children and die early, the government has initiated programs to emancipate them. Afghanistan participates in international population meetings and readily incorporates United Nations and International Planned Parenthood Federation assistance into its national population programs.

In **Iran**, with 38 million people, revolution and war have meant the uneven development of population policies. The success of the 1978 revolution led to the rapid decline of foreign-funded family planning programs. The present government views foreign assistance as an unacceptable form of persuasion and has phased out all internationally funded family planning programs. It says its strategy is to influence fertility behavior by improving the status and education of women, which are viewed as mutually supportive. These gradualist objectives are unequivocally expressed at the international conferences on population that Iran attends.

Sri Lanka, with a population of 15 million, is the only country in the region to have made the demographic transition to fertility decline. This remarkable achievement has been made in spite of low per-capita income by a people as wedded to tradition as any in the region. Although family planning services were introduced in 1958, government support was withheld until 1965 and only in 1977 was population policy made a presidential responsibility and a ministry for family planning established. An impressive health infrastructure delivers family planning services at every level using medical and paramedical professionals, the large-scale retail sale of contraceptives, wide media coverage and cash incentives for sterilization. But Sri Lanka's fertility transition commenced two decades ago and the explanation may lie partly in the country's broad-based welfare benefits which entitle every citizen to free health care, free education and subsidized food. Its citizens' long life expectancy, its women's high literacy rate and average age of marriage, and its low infant mortality rate would have contributed to the people's receptivity to the message of family limitation. Sri Lanka's unique achievement of fertility decline and advanced social development, in the context of poor economic growth, is a message of hope for the region.

Past and Future Successes

Throughout Southwest Asia, the major problem encountered by policymakers has been the strong political sensitivity of population programs, as illustrated by developments in India and Iran. It is not easy to raise population policy above partisan politics in economically backward countries with little social and cultural homogeneity. There is now an awareness that politicians are as important to population programs as are concerned volunteers and informed practitioners. Recognizing this, the United Nations Fund for Population Activities has been in the forefront of arranging international gatherings at which political leaders can develop informed attitudes about the issues of population and development.

In Sri Lanka, delayed marriage, high female literacy and low infant mortality have contributed to small family size. This relatively poor and traditional society has made the transition to fertility decline.

Southwest Asia has produced a number of innovative

ideas in the field of population programs. Massive media coverage for family planning orginated in India, and today many countries sponsor gigantic billboards, colorful shop signs, regular newspaper features, and radio and TV programs devoted to family planning. Popular acceptance of this among basically conservative peoples signals future success.

The establishment of specific institutions for implementing population programs was also pioneered by India. Many countries now have government ministries, coordinating bodies, and training and research institutes exclusively for population and family planning programs. Several of these organizations have developed regional linkages to their mutual benefit.

The widespread use of traditional practitioners and midwives to deliver family planning services is a bold innovation that developed in Nepal and Bangladesh. It has been replicated in many regions and has proved successful in spreading primary health care as well.

As family planning programs basically serve a female clientele they have, in this region, placed women in the center of the picture. Government-sponsored campaigns aimed at raising women's awareness and participation have subtly raised their visibility and their standing in the community. Freed from the cycle of repeated childbearing, rural women have found new freedom and new roles, initially as volunteers and workers in family planning programs and later in women's organizations and rural industries. These small steps may not constitute a dramatic liberation, but they would never have been achieved without the population policies adopted in the region.

International assistance has played an important supportive role in the development of the region's national family planning programs; the initial impetus in most countries was provided by the International Planned Parenthood Federation. During the last decade the picture has become a rich mosaic of assistance from a variety of United Nations, bilateral and nongovernmental sources carefully tailored to fit national programs, many of which would collapse without this aid.

Ten years after the Bucharest Conference, the population scene in Southwest Asia is heartening. Although absolute numbers continue to increase, all governments in the region have adopted policies to limit their population growth. Institutions have been developed, international assistance intelligently harnessed, and innovative ideas courageously pursued in the promotion of family planning. Progress will continue unabated as this region has shown an admirable awareness that population planning will contribute to a better life for its people. □

East and Southeast Asia Assessment

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East and Southeast Asia is a vast area which includes not only many diverse countries but three of the largest of the world's populations—China, India and Indonesia. There is every kind of topography and geography. Some countries are islands or have extremely limited land areas and these are almost completely urbanized, as exemplified by Singapore and Hong Kong. Other countries are still 90 percent rural, with some of the highest rural population densities on earth.

All the region's urban areas are growing rapidly as people migrate in search of a modern lifestyle or simply a more economically productive existence. Yet the problems encountered in Asia's cities prove daily that rural-to-urban migration is not the answer to the problems of the rural poor. Many countries are experiencing severe demographic pressure caused by uneven population distribution, continued high or medium birthrates and falling mortality rates. This is true despite the existence of family planning programs that have been active for many years.

The vast diversity of the Asian region is reflected not only in language and culture but also in the way the people of these separate cultures approach problems. Yet, in spite of societal differences and varied economic successes, the people of East and Southeast Asia share one cultural value: the love of children and the importance of family. In all the countries there are parables, folk beliefs or traditions which highlight the value of children as a necessary and wonderful part of life. The small-family norms espoused by family planning programs, the goal in some countries of one- or two-child families, the concept that two children

are enough no matter what their sex—all these ideas contradict the basic cultural appreciation for children in most countries and the preference for sons in many.

Yet demographic realities give Asia no other choice. If any country allowed its population to grow unchecked, the result would be disaster for all. Thus, it is necessary to work against the tide of cultural values to increase the opportunities for individuals, their families, their countries and the region as a whole.

All the countries of this vast region have had family planning programs since at least the 1970s. Some, like the Singapore program, have been extremely successful. The Singapore government has encouraged its citizens to accept family planning in order to reap the benefits of education, housing and many other services it offers. Indonesia's program has also been successful, bringing the level of contraceptive prevalence from almost zero in 1970 to over half of all married women of reproductive age in 1984. Thailand, Korea, and Taiwan have also developed programs which seem to work effectively for their own countries and cultures. Some family planning programs have been less successful due to a variety of factors such as political instability or lack of government commitment.

During the pioneering years of family planning, the 1950s and 1960s, progressive groups often met with not only cultural resistance but government pronatalism. Official resistance is a thing of the past, as government leaders now recognize that without strong population programs, the economic development which is so necessary cannot be achieved. But the greatest challenge to population planning, even where official support is strong, will occur during this and the coming decade. Because of the very young age structure throughout the region, for every woman who is 45 and ready to leave the family planning program there are many women who are 15 and about to enter their reproductive years. In the coming years, then, the need for contraceptive delivery, population education, and funding for all types of family planning support will be very great.

It will be well into the next century before the populations of most East and Southeast countries stabilize. Stabilization will take even longer for those countries which do not yet have successful family planning policies and programs.

Successful Programs of the Future

What will be necessary to ensure the success of family planning programs in the future? Each national family planning program requires the full and positive political and financial commitment of its government. The Indonesian program, for example, receives very valuable support from the public affirmation of its goals by every gov-

Because of the region's very young age structure, for every woman who is 45 and about to end childbearing there are many who are 15 and about to enter their reproductive years.

In Singapore, government benefits such as education and public housing are tied to the acceptance of smaller families.

ernment leader, beginning with the President. This verbal commitment is validated by favorable government policies and by strong budgetary support.

Programs also need the freedom to try all manner of new approaches, as a wide variety of family planning methods is necessary to meet the needs of varied populations. The appropriateness and acceptability of a particular method should be decided by program managers and personnel in consultation with potential users, rather than by politicians.

Future family planning programs will need to be even more innovative than they have been. Most have moved from the static clinic-based programs of the early days to community-based distribution of limited methods (usually pills and condoms). Some have developed commercial retail sales in urban areas or throughout the country. Many run education programs to teach new family size values based on demographic realities. Programs have organized media campaigns, parading elephants, family planning rallies and safaris, disincentives for large families and no-birth bonus schemes. At times it seems that there is nothing new to try. But increasingly innovative approaches must be found to reach those not yet in the programs.

Family planning service delivery must be brought ever closer to the client so it will be available in all communities and work places and at all potential public and private service points. At the same time other basic services such as nutrition, income-generating schemes, and general and maternal/child health care must be integrated into the programs. Unless the people's general welfare is improved, whether they live in rural or urban areas, family planning programs will not fully succeed.

Even for the most successful programs, there is much more work to be done. The time from now until 1990 is critical. During this period the responsibility for managing programs must be assumed by the community in order to create a very strong and broad base of national commitment. And at the same time the attitudes of younger generations must be reshaped so that family planning becomes a cultural value and part of their way of life. □

Substantial progress has been made in Southeast Asia to extend family planning services to rural areas. Future programs will need to be even more innovative, and the attitudes of younger generations must be reshaped so that family planning becomes a cultural value and a part of daily life.

China Assessment

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The past decade has witnessed great transformations in China's population. The recent success of the world's most populous country in controlling population growth is the fruit of significant and far-reaching change in both theory and practice. Particularly important to this process have been a better understanding of population problems; growing concern by the government and Chinese Communist party; increased organization and activity around population issues; heightened public consciousness; and a new perspective on population issues.

For many years the people of China were inclined to underestimate the detrimental effects of overpopulation on socio-economic development. But the consequences of the increase of a hundred million people between 1966 and 1970 (during the "Cultural Revolution") provided a bitter lesson that will not soon be forgotten. By 1974 Comrade Mao Zedong stressed that population growth must be brought under control.

Before the 1970s population trends were little studied in China. The interaction between demographic trends and factors of economic development have since become clear, and it is now understood that population growth must be considered an integral part of development strategy. To control the rapid population growth is a part of efforts toward the realization of the four modernizations.

Despite vast territory and an abundance of natural resources, China's average per-capita share of many resources is below the world average. Per-capita arable land, for example, is only 30 percent of the world average. But little consideration was given to environmental factors until they received worldwide attention in the 1970s. The pressures of population growth are not the only cause of ecological disequilibrium, but they are usually a contributing factor. Shortages of food, fuel or building materials, for example, lead to deforestation and other ecological damage, while rapid population growth contributes to air, water and soil pollution.

Growing Government and Party Concern

Since the seventies and particularly since 1978, all levels of government have paid great attention to population problems. A population plan is now part of the socio-economic development plan, for example, and population and family planning issues are included in the government's report to the People's Congress. In 1980 the Central Committee of the Chinese Communist Party issued an open letter to all Party and Youth League members regarding population control. Finally, the report of General Secretary Hu Yaobang to the 12th National Party Congress stated explicitly that population problems will always be treated with extreme importance and that family planning is a basic state policy.

Legislation now makes family planning the right and the duty of each citizen. The revised Constitution of 1982 states that "the nation shall promote family planning so population growth may fit the plans for economic and social development." The new marriage law states that husband and wife are duty-bound to practice family planning and encourages late marriage and late child-bearing.

In China 11 million couples enter reproductive age every year.

Expanding Activities and Organization

A country with an area of 9.6 million square kilometers and a population of one billion requires special agencies to effectively carry out state policy. China has family planning committees under the State Council and at the provincial, municipal and county levels. At the grassroots level staff members with special training gather statistics and engage in publicity, education, contraceptive distribution and technical instruction. Some local family planning committees have enlisted the cooperation of colleges and universities to set up special training units, and in some provinces and municipalities lessons on population are taught in the high schools.

Since 1978 many special institutions for population research have been established, and almost 30 universities or colleges now have special institutes for population research. In 1979 the People's University of China enrolled postgraduates in population science, and in 1981 undergraduates were admitted to population courses at both the People's University of China and Fudan University. Population research offices have been established at the Chinese Academy of Social Sciences and in a number of provinces and municipalities. The publication of findings from the recent census and national fertility survey will be a great impetus to the study of population science in China. There are now population periodicals with nationwide readership, such as "Population Research," "Population and Economics" and "Population in the Northwest."

China's drive for the one-child family results from recognition that its population increased by one hundred million between 1966 and 1970.

Heightened Public Consciousness

It would be impossible to change societal norms to favor late child-bearing and fewer offspring without a change in attitude. Such a change is demonstrated by the fact that since 1975 women in both urban and rural districts have delayed marriage by an average of two years compared with the previous decade, a trend which has contributed considerably to the reduction of average family size. That women continue to marry late despite a new law allowing earlier marriage is the surest proof of their change in outlook.

The heightening of mass consciousness is also witnessed by the fact that 69 percent of women in China practiced birth control in 1981. Furthermore, it is estimated that in 1981 the proportion of first births accounted for 47 percent of total births, a great improvement compared to 21 percent of total births in 1970. Third or higher parity births numbered only 27 percent of total births in 1981.

To attain ideal demographic growth three areas of population dynamics should be carefully planned:

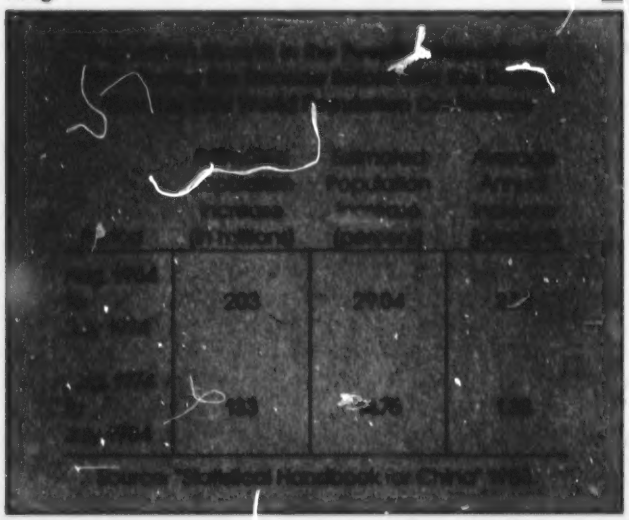
It is important to stick to the policy of limiting population growth and improving the quality of life. Although China's fertility rate decreased considerably during the last ten years, there is great potential for renewed high fertility because of the country's youthful age structure. To achieve well-balanced socio-economic development, China is endeavoring to begin the twenty-first century with a population of less than 1.2 billion. This will require an average annual increase of no more than 10 million during the next 17 years. During this period, however, an average of 11 million couples will enter the ages of marriage and childbearing every year. Nonetheless, a decade of experience in family planning gives China confidence that its population growth can be brought under control.

Arrangements must be made to accommodate the inevitable short-term increase of working-age people. Over twenty million people a year, those born in the high birthrate years of the late 1960s, are now entering the labor

force compared to five to seven million people a year, those born in the 1920s, who are retiring. The result is a net annual increase of over 10 million, a trend which is likely to persist for some time and will rapidly raise the proportion of working-age people among the total population. By the year 2000 the number of people of working age will surpass 800 million, bringing their proportion to about 70 percent of total population. Since these future workers have already been born, it is essential to make efficient use of this huge labor force.

Close watch should be kept on the "aging" of the population. Declining death rates, increasing life expectancy and declining birthrates will inevitably lead to the acceleration of the "aging" of China's population. But it has been projected that by the year 2000, people above 65 years of age will number around 70 million, accounting for only 8 percent of the total population, which is lower than current levels in the United States, Canada and Japan, and much lower than those of Western Europe. The "aging" of of China's population will not soon, if ever, be a problem. If in the long term the huge number of older persons resulting from the high birthrate decades of the 1950s and 1960s do pose problems, the nation's population policies may have to be adjusted.

The change in China's population during the last decade has been tremendous. The decline in fertility is particularly remarkable; it has taken from dozens of years to as long as a century to accomplish this type of decline in the developed countries. China's achievements to date in reducing birthrates under difficult conditions make the nation confident of its ultimate success in population planning. □



Latin America and the Caribbean Assessment

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When the "Alliance for Progress" was launched in 1961 under U.S. President John Kennedy, many of the signatories held the hope that this new alliance would have the same brilliant success in Latin America as the Marshall Plan had had in rebuilding Western Europe after the Second World War.

The immediate concern of Alliance representatives was the region's chronic underdevelopment, which resulted in a poor quality of life for the majority of Latin American citizens. The nutritional deficiency that contributed to a high rate of infant and child mortality was discussed, as were the high illiteracy rate, the lack of proper sanitation, and the shortage of housing and hospital beds. An inter-American program of economic assistance was planned to provide relief from these problems in the following decade.

The Alliance for Progress is now just a romantic—and faded—memory. Why did such an ambitious program fail to bring about large-scale economic and social development in Latin America similar to the way the Marshall Plan had helped Western Europe? A comparison of the two continents a generation ago reveals vast differences in their population structures and perhaps the key to why the two programs for economic development took such different paths.

While Latin America's 1950 population was smaller than that of Western Europe during the Marshall Plan, its rate of population growth was to have devastating implications. Western Europe not only benefitted from a higher level of literacy and technology than Latin America, it also had the

Poverty and high fertility still characterize Latin America, but opposition from both left and right discourage government-funded family planning.

advantage of a moderate and manageable rate of population growth, which went hand-in-hand with economic progress. Of course, the war itself had a significant demographic impact in Europe, but low population growth rates were first and foremost the reflection of a long-held tradition of responsible parenthood. For many years Western European society had favored small families, which allow parents to provide for their children with only minimal help from the state.

In Latin America, on the other hand, a "population explosion" was already underway a generation ago because, in contrast to Europe, that region had developed a strong pro-natalist tradition. Faced with the prevalence of high mortality rates until the 1940s, Latin Americans favored large families whose size was controlled only by the early death of their members.

But during the 1950s, while public health improved dramatically, official and private attitudes failed to keep pace with the new demographic realities. The widescale introduction of DDT helped control malaria without necessitating the improvement of sanitation; sulfa drugs, and later antibiotics, provided treatment for many prevalent infectious diseases; and immunization campaigns eradicated smallpox and diminished death rates from other epidemic infections. The region's death rate fell so spectacularly that in just a few years mortality was less than one third what it had been until 1940. The birthrate remained high, however, bringing the population increase in many Latin American countries to above 3 percent a year.

By 1961 the region was facing runaway population growth at a level unprecedented in its history, yet not a word was mentioned at the Alliance for Progress Conference about what could by then clearly be called a "population explosion." Each Latin American government had fallen, to some degree, under the influence of a domestic "establishment" that stubbornly supported pro-nationalism. Business believed that more people meant more consumers: the military was pleased with the growing number of potential soldiers; and the influential Roman Catholic Church could not conceive that it might be moral to regulate fertility. These powerful forces combined to make the subject of family planning too politically dangerous to be discussed by Latin American governments in an international forum. But it was precisely this omission that doomed the Alliance to failure.

The Beginning of Change

Fortunately, during the 1960s a number of Latin American governments began to act on the recommendations of private groups who were calling attention to the fact that population growth was outpacing the provison of food, sanitation facilities, housing and, particularly, employment opportunities. A few governments accepted the necessity of including contraceptive services in their maternal/child health care programs. Two of the leaders among these countries, Chile and Colombia, have since had a significant drop in birthrates and there is ample evidence to suggest that this has been a major factor in the very favorable declines in their infant mortality rates. Simply put, governments began to realize that smaller families can

take better care of their children and the whole society can thereby benefit.

By the 1970s a significant number of countries supported family planning programs. Today the Cuban and Mexican programs are among the most successful, as are those of Barbados, the Netherlands Antilles and other islands of the Caribbean region. But a few governments are still swayed by pro-natalist forces, and where family planning services are provided only on a private scale, which is necessarily limited, birthrate declines are not as successful.

Because of Latin America's late and mixed response to providing contraceptive services, its 1950 population of 165 million had already grown to 368 million by 1980, an increase of 203 million people in just 30 years. Despite recent fertility declines there is little room for optimism, as the region's birthrates are still double those of the developed world. Current projections indicate a moderate decline in the rate of population growth after 1980, but the number of people added each year will continue to increase. By the end of the century, Latin America will be faced with a total population of 562 million.

A U.N. study shows that severe undernutrition affects from 3 percent to over 40 percent of Latin American children under five years of age, yet by the turn of the century almost 200 million additional people will have to be fed. A continent which exported food in the past is already being forced to import it. Furthermore, in order to earn foreign exchange to pay for the oil needed to fuel budding industries, an increasing proportion of arable land is being used to produce exportable non-food crops such as tobacco and cotton. Add to this the problems of erosion and encroaching cities and the food problem becomes even more devastating.

Looking to the Future

The World Health Organization is now promoting "Health for All by the Year 2000"—but a campaign for good health cannot succeed until family planning services are adequate and easily available. It is time all governments realized how important family planning is to the promotion of family health; those still reluctant to provide contraceptive services only hold back the worthy goals of the campaign.

The decline in fertility over the next twenty years will be greatest in countries that have goverment-supported family planning programs, particularly long-established ones. But even in those countries government efforts are still insufficient, and unwanted children are born. Why do couples have more children than they can properly provide for? The answer can only be that family planning education and services are not being made available to all who need them.

Family planning efforts have certainly come too late and in most cases are still too little. The largest responsibility for the region's population problem rests with our own national governments, but the blame should also be shared by the developed world. At present it is easier for Latin American governments to obtain foreign aid to buy weapons than to promote family planning programs. But how long can peace be maintained under worsening conditions of unemployment and urban blight? The demands of a rapidly expanding workforce must be met when

In Central America family planning alone could reduce infant and maternal mortality by half. For most women, services are inadequate.

unemployment is already unmanageable. Governments must cope with the potential violence engendered by unemployed and alienated people living in overcrowded slums and shantytowns.

In the year 2000 Latin America could survive with a smaller military, but can it survive in peace with a population that far exceeds its resources? It is clear that successful family planning programs are essential to Latin America's peaceful future. □

Looking Ahead
Staff Editorial

J. Joseph Speidel, M.D.
Sharon L. Camp, Ph.D.

The world's population situation has changed dramatically in the decade since the United Nations 1974 World Population Conference in Bucharest. At first glance, there has been great progress: 39 developing countries—containing 78 percent of the developing world's population—now have policies and programs to slow population growth, funded increasingly by national resources rather than by outside assistance. The 12 largest developing countries have achieved birthrate declines of up to 30 percent.

Paradoxically, the situation has at the same time become more critical now than it was ten years ago: the less developed countries have grown by almost 700 million people, a number equivalent to the 1974 populations of Africa and Latin America combined. The developing world increases by one million people every five days (by comparison, the developed world adds eight million people every year). The number of couples of reproductive age is growing by 25 million each year, and over one billion people in developing countries live in areas where very little family planning use or decline in fertility has occurred over the past decade. Despite important changes in public attitudes and official policies, progress has not been rapid or widespread enough to reduce population pressures in the majority of developing countries. Future efforts must be intensified.

In the last decade, continued rapid population growth has undermined hard-won social and economic gains. From 1973 to 1983 the per-capita gross national product of the low-income developing countries changed very little, while it rose by approximately one third in the developed countries. Within and between countries population growth helped expand the income gap between rich and poor. Two factors likely to affect future LDC economic performance are related to high rates of population growth: an extremely high dependency ratio of over 40 percent under the age of 15 years, and an unemployment/underemployment rate of 40 percent which depresses wages and which will worsen as additional large numbers of youth reach working age.

Throughout the developing world, many governments are even now unable to maintain essential services such as sanitation and basic health care for rapidly increasing urban populations. Meanwhile, the vivid contrast between great wealth and extreme poverty worsens in nearly all the burgeoning Third World cities. These conditions, together with the large proportion of people in the volatile ages of 15 to 24 years, intensify political insecurity. In the interests of future world peace and prosperity, these trends cannot be allowed to go unchecked, and time for effective action may be running out.

Over the past decade political leaders and development planners belatedly have begun to understand the complex inter-relationships between population trends, social and economic progress, and orderly political development. It has become clear that population and development efforts are mutually supportive. But world economic trends—particularly the growing debt crisis—suggest that most governments will not have the financial wherewithal to achieve a massive socio-economic transformation in the near future.

On the other hand, the experience of countries such as Indonesia, Mexico, Thailand and Colombia has shown that dramatic decreases in birthrates are possible through organized family planning programs—in some cases with only modest changes in the social and economic setting affecting, for example, the roles and status of women. Many leaders in family planning within developing countries believe that social progress may, in fact, follow rather than precede widespread personal control of fertility.

The Cost of Global Programs

Unfortunately current budgetary constraints in the developing world are not favorable for the initiation or expansion of any programs requiring large new government expenditures, including family planning programs. Today developing countries as a whole fund about 60 percent of Third World population activities. Most of these countries, however, still need donor assistance.

Population programs have proven to be relatively inexpensive. Family planning and related research and training programs now serve some 87 million users in devel-

oping countries (these figures exclude China). This represents an annual public cost, counting all assistance from donors and expenditures by developing countries, of the equivalent of U.S. $1.1 billion, or only $0.44 per person. As a result of public and private expenditures the average user rate in developing countries has risen to 21 percent. However, stabilizing world population will eventually require a user rate of almost 80 percent (and even then population growth will continue for many years, owing to the youthful age structure in most countries).

To achieve the necessary user rate, the experts calculate, global family planning expenditures will have to increase to between $4 billion and $7 billion annually. Over the next decade a substantial portion of necessary funding—at least a billion dollars annually if most Third World couples are to be reached—will have to come from donor sources.

But during the past decade donor assistance for population activities has stagnated and in some cases decreased in real terms. Available funds annually fall more than $150 million short of specific developing country requests for medical training, technical assistance, contra-

Although population programs have proven relatively inexpensive, budgetary constraints in the developing world impede their expansion.

ceptive supplies and other program needs which cannot yet be fully funded with national resources. Donor countries provide overall development assistance, for all sectors, of about $35 billion, the equivalent of $10 for each person living in the developing world. Population assistance, however, totals only about $450 million, or $0.13 per person. A small shift in the share of development assistance devoted to population would go a long way toward strengthening family planning programs around the world.

Of course money alone will not solve population problems. In many countries restrictive laws or policies make the delivery of family planning services difficult or costly—legal restrictions on particular methods of birth control, for example, or restrictions which hamper commercial distribution. Only a few countries provide adequate support to children's health services, women's education and employment, and other social development programs that may encourage smaller family size. And only a few have launched public education campaigns designed to change traditional attitudes toward contraception and family size.

Despite legal or program limitations, the most important barrier to the widespread availability of family planning services is the lack of resources. Compared to the levels of investment required in other development sectors, however, the resources needed are quite small and the returns to human welfare are incalculable. Obviously substantially increased efforts to bring family planning information and services to developing countries are needed—otherwise the projected declines in Third World fertility will not occur.

Much as been learned over the last decade. In the decade ahead political leaders must find the will to apply these lessons with sufficient energy to finally change the course of world population growth. □

Population Dynamics of the Twelve Most Populous Developing Countries 1973, 1983 and 2020

Country	Percent of all Developing Countries Population in 1983		Births per 1000 Population		Percent Change	Population (in millions)		Percent Change from 1973	Projected Population 2020*	Percent Change from 1973
	%	cumulative %	1973	1983		1973	1983			
China	29.7%	29.7%	30	21	−30%	906.3	[illegible]34.5	+14%	1426.1	+57%
India	20.5%	50.2%	40	35	−13%	591.6	[illegible]30.6	+23%	1194.8	+102%
Indonesia	4.5%	54.7%	40	32	−20%	131.[illegible]	160.9	+23%	238.4	+82%
Brazil	3.7%	58.4%	36	31	−14%	103.[illegible]	131.3	+27%	268.6	+160%
Bangladesh	2.7%	61.1%	50	47	−6%	72.5	96.5	+33%	210.4	+190%
Pakistan	2.7%	63.8%	45	43	−4%	71.1	94.8	+33%	196.5	+176%
Nigeria	2.4%	66.2%	50	49	−2%	63.7	85.2	+34%	255.5	+301%
Mexico	2.1%	68.3%	42	32	−24%	58.0	75.7	+31%	162.4	+180%
Vietnam	1.6%	69.9%	41	35	−15%	46.3	57.0	+23%	100.1	+116%
Philippines	1.5%	71.4%	38	33	−13%	40.8	53.2	+30%	101.7	+149%
Thailand	1.4%	72.8%	38	26	−32%	40.3	50.7	+26%	87.4	+117%
Turkey	1.4%	74.2%	37	31	−16%	38.6	49.2	+27%	95.2	+147%
TOTAL						2163.6	2619.6	+21%	4337.1	+100%

Sources: "World Population 1983," U.S. Bureau of the Census
"1983 World Population Data Sheet," The Population Reference Bureau
"Demographic Indicators of Countries: Estimates and Projections as Assessed in 1980," United Nations
*Population Reference Bureau projections

How to read this chart, using Indonesia as an example:

In 1983 Indonesia made up 4.5 percent of the population of all developing countries; its cumulative contribution to the population of the developing world (with China and India) was almost 55 percent. Between 1973 and 1983 Indonesia's birthrate, or number of births per 1,000 people, dropped substantially, from 40 to 32—a 20 percent decline. During that same decade, however, the country's population grew by 23 percent, from 131 million in 1973 to almost 161 million in 1983. Since Indonesia's population is projected to be just over 238 million in the year 2020, it will have grown 82 percent between 1973 and 2020.

These twelve countries account for three quarters of the population of the developing world—which is projected to increase 100 percent from 1983 to 2020.

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